



# Smithsonian Institution

This content package contains a variety of thematic content addressing themes of entrepreneurship and innovation. These topics include invention, design, business environments, the role of women in business, etc. We have split the content by the type of media or usage: Videos; Online exhibitions; Podcasts; Lessons and activities. We also provide ideas for ways to use the content in an American Spaces program. Please send any feedback to Liz Tunick (TunickL@si.edu).

## Videos

Business of Design: [https://www.youtube.com/watch?v=S4XeR\\_sZzpl&feature=youtu.be](https://www.youtube.com/watch?v=S4XeR_sZzpl&feature=youtu.be) (design in business)

Every year, the Cooper-Hewitt, National Design Museum hosts a panel on the “business of design” with young entrepreneurs and experts speaking on the role of design in business. *Search “Business of Design” on the museum’s YouTube channel to find a series of videos dedicated to this topic, which can provide a framework for group discussions in response to each video. Recommended video is “Cooper-Hewitt: 2012 Business of Design-Young Designers.”*

LA Frock Stars: <https://www.youtube.com/watch?v=pD8K3dNsdos> (women in business)

“LA Frock Stars: Business of Vintage” is a video series from Smithsonian Channel on what it takes to successfully run a vintage clothing store in Los Angeles, featuring interviews with local entrepreneurs and business owners who invest in the “frock market.” *Videos could provide a good introduction to discussing invention and entrepreneurship with individuals or groups who have interest in arts or fashion. Consider working with a local fashion designer to facilitate a discussion.*

Pioneers Turned Millionaires: <https://www.youtube.com/show/pioneersturnedmillionaires> (entrepreneurs)

The “Pioneers Turned Millionaires” video series from Smithsonian Channel features profiles of American figures who turned new inventions or processes into business empires. Profiles include diverse figures like John Henry Heinz, ketchup tycoon, and William Boeing, founder of Boeing air company. *Use these videos to discuss local and global entrepreneurs that serve as inspiration for a new generation of business owners.*

Silicon Valley Rebels: <https://www.youtube.com/watch?v=SWML0b6cpbw> (business environments)

“Silicon Valley Rebels: How To Build a Successful Tech Company” (3:23) features interviews with Bob Noyce and Gordon Moore who got fed up with the management at the company where they worked and struck out on their own to start a company that valued its employees and their ideas—Intel. *Use video to discuss workplace values, and how to take action on change that you want to see. Consider working with local tech/app developers to facilitate discussion.*





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Behind the Scenes at the U.S. Patent and Trademark Office: <http://www.smithsonianmag.com/videos/behind-the-scenes-at-the-united-states-paten/?no-ist> (entrepreneurs)

This video explores how the patent and trademark process works in the U.S. and how it serves to encourage a culture of invention and entrepreneurship. It features a 19-year old patent holder for an under-floor storage system. *Use this video as the starter for a larger discussion on tangible steps entrepreneurs need to take in your country to obtain a patent – or if patents don't exist, consider discussing the value of intellectual property.*

## Online exhibitions

American Enterprise Initiative: <http://americanenterprise.si.edu/> (business environments)

Blog and upcoming exhibition opening in 2015 from the National Museum of American History on the critical role of business in shaping the American experience. The exhibition will illustrate how the changing balance between efficiency, equity, and control has provided opportunities for many, great benefits for some, and hardships for others. “Explore the Exhibition” section allows users to look at objects that will be featured in the exhibition. *Exploration of the exhibition website can provide a framework for discussion of business in the local community and how it may be changing. Consider having visitors read the “Explore the Exhibition” section and specifically the “Global Marketplace” sub-section. Ask them what other products or services are hallmarks of the 21<sup>st</sup> century, and how the individuals behind those products/services achieved success.*

Wright Brothers: <http://airandspace.si.edu/exhibitions/wright-brothers/online/> (entrepreneurs)

Online exhibition on the Wright Brothers, inventors of the modern airplane, from the National Air and Space Museum. Learn how two small town businessmen invented a technology that would define the 20th century. *Use the exhibition to discuss local and global entrepreneurs that serve as inspiration for a new generation of business owners. “Wright Brothers Biography” lesson plan can be useful in working with visitors to create an online biography of the Wrights based on reading documents in the online exhibition.*

Industrial Drawings: <http://www.sil.si.edu/exhibitions/doodles/> (invention)

“Industrial Drawings” online exhibition from National Museum of American History explores how engineers, inventors, and designers produce drawings as part of their creative process. They draw to work out and refine concepts and details; they draw to persuade; they draw to give direction; they draw to record their ideas and to learn from others. *Use the “View the Objects” gallery to discuss the conditions that surrounded the invention of specific objects and what inventions might come out of current conditions. Use the “Convincing” section to discuss the design of products and what elements go into that process, such as prototyping.*

Inventors at Play: [http://invention.smithsonian.org/centerpieces/iap/inventors\\_main.html](http://invention.smithsonian.org/centerpieces/iap/inventors_main.html) (invention)

Inventors at Play Family Guide: <http://invention.smithsonian.org/centerpieces/iap/iapfamilyguide.pdf>

“Inventors at Play” online exhibition from the National Museum of American History explores the stories of inventors, both famous and little known, whose creative habits began in childhood play and resulted in a variety of useful contributions. *Consider having visitors choose a favorite profile and then discussing what*





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qualities or ideas that person had that are inspirational. Recommended profiles include: “Akhil Madhani- Surgical Robots,” “Lydia O’Leary- Covermark Cosmetics,” and “John Fabel: EcoTrek Backpack.” *Inventors at Play Family Guide* can be a useful handout for American Spaces visitors or can serve as the basis for strengthening reading comprehension in English.

Edison Invents: <http://invention.smithsonian.org/centerpieces/edison/> (invention)

“Edison Invents” online exhibition from National Museum of American History explores how Thomas Alva Edison changed our world, giving us electric lights in our home and an entire system that produced and delivered electrical power. Use the “Make Your Own Light Bulb” activity for a hands-on program in which American Spaces visitors get a chance to go through an engineering experience and be in Edison’s shoes. Consider working with a local engineer to facilitate the activity.

Invention of the Electric Guitar: <http://invention.smithsonian.org/centerpieces/electricguitar/index.htm> (invention)

“Invention of Electric Guitar” online exhibition from National Museum of American History explores the process of invention as it relates to the electric guitar- amplifying the sound of a guitar by means of electricity, for example, involved many inventors and musicians working since the 1920s to develop, design, and popularize a louder instrument. Exhibition could provide a good introduction to discussing invention and entrepreneurship with individuals or groups who have interest in arts or music. Consider working with a local music store owner or music teacher to facilitate the discussion.

Julia Child’s Kitchen: [http://amhistory.si.edu/juliachild/flash\\_home.asp](http://amhistory.si.edu/juliachild/flash_home.asp) (women in business)

Julia Child was not only a groundbreaker in the world of food—she was a businesswoman who turned her passion into a global media business. Use the online exhibition to explore the events in Child’s life that contributed to her success. Have visitors discuss some female role models in the community or region who have turned passions or talents into successful businesses.

Setting the Precedent: <http://amhistory.si.edu/archives/WIB-tour/mainMovie.html> (women in business)

“Setting the Precedent: Women Who Excelled in Business” online exhibition from National Museum of American History explores how the accomplishments of today’s outstanding businesswomen owe much to the groundwork of earlier generations of female entrepreneurs and workers. Exhibition looks at how businesswomen have always struggled with the unique challenges presented by socially determined gender roles, which have both created opportunities for women’s advancement and limited their growth as professionals. Use the four women profiled in the exhibition as the basis for a discussion on inspirational female leaders in the local and global community. Consider working with a local female business leader to facilitate discussion.

### Podcasts

Invention Podcasts: <http://invention.smithsonian.org/video/> (invention)





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Invention Podcasts Listening Guide: <http://invention.smithsonian.org/downloads/lemelsonpodguide.pdf>

Downloadable podcasts from the National Museum of American History's Lemelson Center for the Study of Invention and Innovation that feature contemporary entrepreneurs and inventors. *Use accompanying podcast activity guide, which includes questions that can be used to direct listening and guide further discussion.*

Recommended podcasts:

- Ashok Gadgil inspires future inventors
- Walter Isaacson explores Benjamin Franklin's legacy
- Stan Winston makes robots smart
- Deanne Bell believes engineering is for girls
- Michael Callahan ties invention to social entrepreneurship
- Norman Winarsky taps into Silicon Valley's culture of innovation

## Lessons and activities

Blast From The Past lesson plan: <http://dx.cooperhewitt.org/lessonplan/Blast-from-the-Past-2/> (design)

Throughout history people have designed objects that have changed and enhanced the quality of people's lives. These objects help us to both survive and enjoy life. In this activity from the Cooper-Hewitt National Design Museum, participants analyze famous designs of the past (e.g. compass, polio vaccine, Barbie doll) and how their invention impacted the world. *This exercise provides a framework for a public program wherein American Spaces visitors can examine and discuss what it means to be an inventor or entrepreneur, and challenged to develop inventions to address local needs.*

Women Inventors and Their Inspirations educator guide:  
<http://invention.smithsonian.org/downloads/wminventorsguide.pdf> (invention)

This teacher's guide from the National Museum of American History includes profiles of famous women inventors and the circumstances surrounding their success. *Use the included discussion questions to discuss role models, on global and local level. Consider working with a local female inventor/patent holder to facilitate conversation.*

